



DATA SHEET

# IQ25-05BPSDU2S

IQV  
Inductive proximity sensors

## INDUCTIVE PROXIMITY SENSORS

## IQ25-05BPSDU2S

## ORDERING INFORMATION

Type	part no.
IQ25-05BPSDU2S	6042046

Further device versions and accessories at [www.sick.com/IQV](http://www.sick.com/IQV)



## DETAILED TECHNICAL DATA

## FEATURES

Housing	Rectangular
Dimensions (W x H x D)	25 mm x 50 mm x 10 mm
Sensing range $S_n$	5 mm
Safe sensing range $S_s$	4.05 mm
Installation type	Flush
Switching frequency	500 Hz
Connection type	Cable, 3-wire, 2 m
Switching output	PNP
Switching output detail	PNP
Output function	NO
Electrical wiring	DC 3-wire
Enclosure rating	IP67 <sup>1)</sup>

<sup>1)</sup> According to EN 60529.

## MECHANICS/ELECTRONICS

Supply voltage	10 V DC ... 30 V DC
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<sup>1)</sup> Of  $V_s$ .

<sup>2)</sup> At  $I_s$  max.

<sup>3)</sup> Supply voltage  $U_s$  and constant ambient temperature  $T_a$ .

<sup>4)</sup> Of  $S_r$ .

Ripple	≤ 15 % <sup>1)</sup>
Voltage drop	≤ 2.5 V <sup>2)</sup>
Time delay before availability	≤ 50 ms
Hysteresis	1 % ... 15 %
Reproducibility	± 5 % <sup>3)</sup> <sup>4)</sup>
Temperature drift (of S <sub>1</sub> )	± 10 %
EMC	According to EN 60947-5-2
Continuous current I <sub>s</sub>	≤ 200 mA
Cable material	PUR
Conductor size	0.34 mm <sup>2</sup>
Cable diameter	Ø 4.6 mm
Short-circuit protection	✓
Shock and vibration resistance	30 g, 11 ms / 10 ... 55 Hz, 1 mm
Ambient operating temperature	-25 °C ... +70 °C
Housing material	Aluminum, GD Zn
Sensing face material	Plastic, PBT

<sup>1)</sup> Of V<sub>s</sub>.

<sup>2)</sup> At I<sub>s</sub> max.

<sup>3)</sup> Supply voltage U<sub>s</sub> and constant ambient temperature Ta.

<sup>4)</sup> Of S<sub>r</sub>.

### SAFETY-RELATED PARAMETERS

MTTF <sub>D</sub>	1,488 years
DC <sub>avg</sub>	0%
T <sub>M</sub> (mission time)	20 years

### REDUCTION FACTORS

Note	The values are reference values which may vary
Stainless steel (V2A, 304)	Approx. 0.7
Aluminum (Al)	Approx. 0.4
Copper (Cu)	Approx. 0.3
Brass (Br)	Approx. 0.4

### INSTALLATION NOTE

Remark	Associated graphic see "Installation"
A	0 mm
B	25 mm
C	25 mm
D	15 mm
E	0 mm
F	75 mm

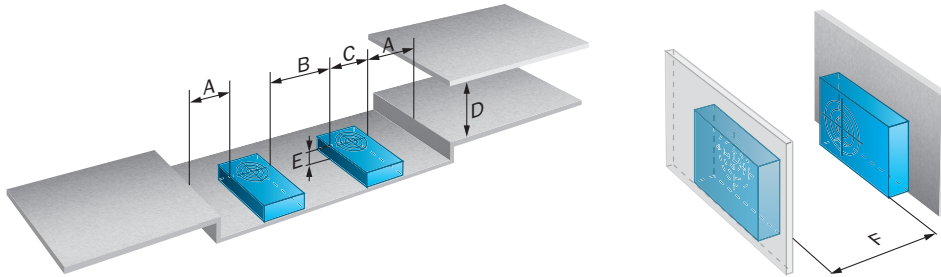
### CERTIFICATES

EU declaration of conformity	✓
China RoHS	✓

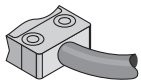
# INDUCTIVE PROXIMITY SENSORS - IQ25-05BPSDU2S

China Compulsory Product Certification (CCC) exempt	✓
cULus certificate	✓

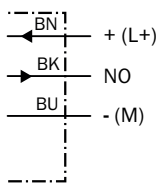
## INSTALLATION NOTE



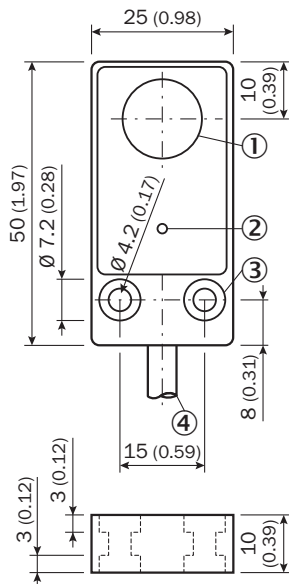
## CONNECTION TYPE



## CONNECTION DIAGRAM CD-001



## DIMENSIONAL DRAWING IQ25



Dimensions in mm (inch)

- ① Sensing face
- ② Function signal indicator (green)
- ③ fixing hole
- ④ Connection

Further information as well as suitable accessories, example applications and downloads such as CAD dimensional models, operating instructions and software can be found at [www.sick.com/6042046](http://www.sick.com/6042046)



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SICK combines sensor intelligence with industry expertise and certified consulting services. We provide the ideal foundation for scalable as well as tailor-made automation solutions and create added value along the entire value chain. Our close partnerships with our customers are more than just a promise: Together, we optimize productivity, improve quality, protect health and safety, and help build a sustainable future. All with empathy and trust.

Since 1946, we have been developing innovative technologies with passion and a pioneering spirit. With a global network in around 40 countries, SICK has a global presence and is always close by. The company's headquarters are located in Waldkirch near Freiburg, Germany. Our customers benefit from our understanding of both local and global requirements, which enables us to deliver tailor-made solutions

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Sensor Intelligence